

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for creating a file information database comprising:

scanning a storage server having a directory structure;

collecting data regarding the directory structure;

for each directory of the directory structure, determining whether each member of the directory is a file or subdirectory;

using a first thread to assign a first unique identification (ID) number to a first determined directory and a second unique ID number to a second determined directory in the directory structure according to a depth first search (DFS) order, wherein the directory numbers are assigned while the directory structure is being traversed in the DFS order;

using a second thread to examine the determined files; and

writing a data structure including the first ID number, the second ID number and a relation between the first directory and the second directory.

2. (Original) The method of claim 1, wherein scanning and collecting comprise scanning and collecting by using an agent separate from the storage server.

3. (Original) The method of claim 2, wherein the agent has a first file system, and the storage server has a second file system, and wherein the first file system is different from the second file system.

4. (Previously Presented) The method of claim 1, wherein the relation indicates that the first directory is an immediate child of the second directory.

5. (Original) The method of claim 1, wherein assigning further comprises assigning the ID numbers while collecting the data.

6. (Original) The method of claim 1, wherein writing the data structure further comprises writing the data structure to a database server.

7. (Previously Presented) The method of claim 4, further comprising:
receiving a request to determine the parent of the first directory; and
referencing the relation between the first directory and the second directory of the data structure to determine the parent of the first directory.

8. (Previously Presented) The method of claim 4, further comprising:
receiving a request to determine an immediate child of the second directory;
searching the data structure to find any relation, including the relation between the first directory and the second directory, which indicates that the second directory is a parent in said relation; and
determining the immediate child of the second directory based on said any relation.

9. (Previously Presented) The method of claim 4, further comprising:
receiving a request to determine a set of ID numbers of every child of a third directory in the directory structure, wherein the third directory is assigned a third ID number;
determining a fourth ID number of a sibling of the third directory; and
determining the set of ID numbers between the third ID number and the fourth ID number.

10. (Currently Amended) A machine readable medium having stored thereon executable program code which, when executed, causes a machine to perform a method for creating a file information database, the method comprising:

scanning a storage server having a directory structure;

collecting data regarding the directory structure;

for each directory of the directory structure, determining whether each member of the directory is a file or subdirectory;

using a first thread to assign a first unique identification (ID) number to a first determined directory and a second unique ID number to a second determined directory in the directory structure according to a depth first search (DFS) order, wherein the directory numbers are assigned while the directory structure is being traversed in the DFS order;

using a second thread to examine the determined files; and

writing a data structure including the first ID number, the second ID number and a relation between the first directory and the second directory.

11. (Original) The machine readable medium of claim 10, wherein scanning and collecting comprise scanning and collecting using an agent separate from the storage server.

12. (Original) The machine readable medium of claim 11, wherein the agent has a first file system, and the storage server has a second file system, and wherein the first file system is different from the second file system.

13. (Previously Presented) The machine readable medium of claim 10, wherein the relation indicates that the first directory is an immediate child of the second directory.

14. (Original) The machine readable medium of claim 10, wherein assigning further comprises assigning the ID numbers while collecting the data.

15. (Original) The machine readable medium of claim 10, wherein writing the data structure further comprises writing the data structure to a database server.

16. (Previously Presented) The machine readable medium of claim 13, further comprising:

receiving a request to determine the parent of the first directory; and
referencing the relation between the first directory and the second directory of the data structure to determine the parent of the first directory.

17. (Previously Presented) The machine readable medium of claim 13, further comprising:

receiving a request to determine an immediate child of the second directory;
searching the data structure to find any relation, including the relation between the first directory and the second directory, which indicates that the second directory is a parent in said relation; and
determining the immediate child of the second directory based on said any relation.

18. (Previously Presented) The machine readable medium of claim 13, further comprising:

receiving a request to determine a set of ID numbers of every child of a third directory in the directory structure, wherein the third directory is assigned a third ID number;
determining a fourth ID number of a sibling of the third directory; and

determining the set of ID numbers between the third ID number and the fourth ID number.

19-27. (Canceled)

28. (Previously Presented) A method for creating a logical tree comprising:
using a directory walking thread to examine a first directory from a top of a directory queue, and determine a set of children of the directory;
assigning a depth first search (DFS) ID to the first directory, wherein the directory numbers are assigned while the directory structure is being traversed in the DFS order;
examining a set of children of the first directory to determine a first subset of files and a second subset of directories
placing the first subset of files in a file queue for examination by a file thread; and
placing the second subset on the top of the directory queue.

29-31. (Canceled)

32. (Currently Amended) The method of claim ~~34~~28, wherein examining the file queue further comprises recording information about a first file taken from the file queue.

33. (Canceled)

34. (Currently Amended) The method of claim ~~34~~28, wherein the directory walking thread is hosted by an agent that is separate from the storage server.

35. (Previously Presented) The method of claim 34, further comprising using an MMA to control the agent.

36. (Currently Amended) The method of claim 34, wherein the directories are hosted by ~~is~~ a filer.

37-38. (Canceled)

39. (Currently Amended) A method for creating a file information database comprising:

scanning a storage server having a directory structure;

for each directory of the directory structure, determining whether each member of the directory is a file or subdirectory;

using a first thread to assign a first unique identification (ID) number to a first determined directory and a second unique ID number to a second determined directory in the directory structure according to a depth first search (DFS) order, wherein the directory numbers are chronologically assigned in numerical order while the directory structure is being traversed in the DFS order;

using a second thread to examine the determined files; and

writing a data structure including the first ID number, the second ID number and a relation between the first directory and the second directory.

40. (Previously Presented) The method of claim 1, wherein a top level directory of the directory structure is assigned an ID of "0" (zero).

41. (New) A method for storing results of a file walk of a storage server comprising:

performing a file walk of a storage server, wherein performing the file walk includes assigning unique identification numbers to directories of the storage server in a depth first search order during the file walk;

storing indications of the directories of the storage server, the indications stored in association with the unique identification numbers assigned during the file walk; and

traversing the stored indications based on the unique identification numbers to determine relationships between the directories of the storage server.